

Rejection of Geocentrism and Modernity. The Theological Implications of Nicolaus Cusanus' Cosmology

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Abstract: Although it did not generate echoes comparable to those caused by Nicolaus Copernicus, Johannes Kepler or Galileo Galilei, the vision of the Universe initiated by Cardinal Nicolaus Cusanus marked, practically for the first time in the Christian world, the rejection of the geocentric model of the Cosmos, so familiar to the medieval Church. Starting from here, our study aims to assess both the foundations of the cardinal's innovative vision and the impact – perhaps surprising, but visible – that his cosmology generated on the most “tangible” structures of medieval theology. We will therefore insist on deciphering how Cusanus's cosmology impacted some of the essential components of the Church's current discourse and activity, namely on those which, above all, could be the object of the most common experience and representation of the faithful.

Keywords: Religion, Cusanus, Mission, Cosmology, Geocentrism

As several thinkers such as Jacob Taubes, Rémi Brague, and Alexandr Koiré have pointed out, we are perfectly entitled to regard the elaboration of heliocentric cosmology as a somewhat surprising but no less authentic expression of the prefigurations that the dawn of modernity brought about in terms of man's intellectual relationship to himself and the world around him. Or, to put it another way, the progressive advance of the model of a Cosmos dominated, by the very attribute of physical centrality, not by the Earth but by the Sun, also reflected the emergence of ‘structural’ changes, specific to modernity, in the way 16th-17th century man was willing and able to think about and interpret reality, using for this purpose both observation and the cognitive and explanatory resources of mathematical modeling. Therefore, if, as Jacob Taubes wrote, in every historical epoch, “man's representation of the divine and ...of the Cosmos depend on each other and correct each other”². Then between certain “sequences” of theological

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² Jacob Taubes, *Teologia după revoluția copernicană*, trans. Andrei State and George State (Cluj-Napoca: Tact, 2009), 31.

thought and cosmology a “correlation” can appear, an interweaving at the ideational level, which, quantifiable as it is, can be deciphered and measured as such.

Modern heliocentrism is known to begin with the Polish Catholic priest and astronomer Nicolaus Copernicus (1473-1543), the first European after Aristarchus of Samos (310-230 BC) to place the Sun at the center of the Universe, implicitly viewing it as the absolute pole of the rotational motions of all other celestial bodies. By then, however, the traditional geocentric view had been rejected³ by Cardinal Nicolaus Cusanus (1401-1464), who, using almost exclusively philosophical and theological arguments, invalidated the very possibility of a physical center of the world. By relating the cardinal's radical change of cosmological vision to the analytical perspective indicated by Jacob Taubes, it will be possible to identify a series of consequences, sufficiently precisely outlined, regarding how the believer can perceive himself and interpret the place and the role of the Church in mediating man's link with God, all of which will be discussed below.

1. The foundations of Cusanus's cosmology

Despite the fact that the foundations of his cosmology are primarily speculative, it is unquestionable that the world of the cardinal “is no longer the medieval Cosmos”, even if, at the same time, it “is not yet” the Universe explicable by physical-mathematical laws theorized by Kepler or Newton. Nevertheless, Nicolaus Cusanus is not infrequently considered to be the only European precursor of Copernicus, not least because his vision of the Universe reveals “a new breath” of obvious Renaissance inspiration, a breath which, in a way, anticipated the future explosion of positive sciences following modern thought⁴.

In fact, by setting out to demonstrate the philosophical and theological incoherence of geocentrism, the cardinal overcame, after more than a millennium, the tendency to attribute to the Earth “a privileged position at the center of the Universe” and, implicitly, a special cosmological status, sometimes linked to the anthropocentrism dominant in the Greek and Hellenistic world⁵.

At the same time, his argument (itself philosophically and theologically inspired) in favour of the ontological uniformity of the cosmos was directly opposed to the ancient presuppositions concerning the heterogeneity of the universe and its “stratified” organization according to the degree of “purity”

³ Nicolaus Cusanus, *De docta ignorantia*, trans. Andrei Bereschi (Iași: Polirom, 2008), 144.

⁴ Alexandre Koyre, *De la lumea închisă la universul infinit*, trans. Vasile Tonoiu (București: Humanitas, 1997), 20.

⁵ G.E.R. Lloyd, *Metode și probleme în știința Greciei Antice*, trans. Paul Sfetcu (București: Tehnică, 1994), 177.

and “perfection” of the matter of which it is composed, a point of view entirely compatible with the deeply hierarchical character of the medieval world.

a) Basically, Nicolaus Cusanus invalidated the fundamental coordinates of his contemporary cosmology, both those related to the configuration of the Universe and those related to its structure, proposing a completely new perspective on the observable Cosmos⁶.

The Middle Ages had fully assimilated the cosmological vision elaborated in the middle of the 20th century. This vision, drawing on the Aristotelian “tradition” and, at the same time, on the consistent observations of the remarkable astronomer Hipparchus of Nicaea, proposed a cosmos which, having its immobile center in a spherical Earth, was bordered by the equally spherical vault of fixed stars. At the same time, the Sun, the Moon, and the five planets known in antiquity (Mercury, Venus, Mars, Jupiter, Saturn) were gravitating around the Earth, following *epicyclic trajectories* (epicycles being curves corresponding to the trajectory of a point situated on a circle – an *epicycle* which rolls uniformly around the circumference of another circle). The use of epicycles to describe with acceptable accuracy the apparent motion of the seven stars only reflects the decisive role that ancient astronomy gave to the circle and the sphere, which were seen as faithful representations of the mathematical perfection that characterized the Greek cosmos.

On the other hand, Ptolemy’s cosmology distinguished in a quasi-ontological manner between the “sublunar” and the “supralunar” world, namely between a world “below” the epicycloid described by the Moon (thus near to the immobile Earth), essentially telluric, and a celestial world “beyond” the apparent lunar trajectory, clearly “superior” to the former. The differences between the two worlds are presented as absolutely remarkable, as, “enveloping the Earth with everything on it”, the sublunar one will be a “an ever-changing and therefore corruptible mixture”⁷ composed of earth, water, air and fire, i.e. the four Empedoclean elements, while the one “above” it, including the Sun and the other five planets, will be composed of aether – *aither*, respectively from a “...fine, non-decomposable, ever-living matter,”⁸ carrying with it all imaginable perfections. The epicycle described by the Moon will thus delimit two completely opposable worlds: one made up of a coarse and corruptible matter, inevitably subject to degradation and death, and the other, the etheric, devoid of any kind of imperfection and revealing a “special, pure, unchanging and incorruptible essence”. The identification of the supernal world as ethereal explicitly marks its

⁶P.P. Negulescu, *Filosofia Renașterii* (București: Eminescu, 1986), 104.

⁷Negulescu, *Filosofia*, 104.

⁸Mircea Florian, “Filosofia greacă,” in *Filosofie. Analize și interpretări*, eds. Vasile Morar and Nicolae Năstase (București: Antet, 1996), 36.

superiority in an ontological sense, a perspective perfectly rooted in the Greek philosophical tradition and to which Ptolemy did nothing but “adapt” to his cosmology. Thus, as early as the 6th century BC, Diogenes of Apollonia spoke of ether as “a substance ... which has a pure and better nature, eternal, living and rational;” at the same time, Empedocles of Agrigento practically deified ether, linking it to “...the shining sky above, itself divine and the home of divinity,”⁹ which is completely opposed to the perishable and mortal matter of the world of the four elements; finally, Plato regarded ether as “a kind of air,” although superior to air itself, so that Aristotle considered it, like Empedocles, as “the fifth element,” “the fifth essence” (*quinta essentia*), one predestined to an eternal and perfect existence¹⁰.

Having reached this stage, we cannot fail to point out that Ptolemy's cosmos, thus conceived, seems to be under a certain tension, for the primacy (geometrical and astronomical) of the Earth as the physical center of the universe and as the referential pole of the rotational movement of the stars is in contradiction with its supposed inferiority in ontological terms. In other words, putting together, in a system with the vocation of completeness - such as the Ptolemaic one - the two axiomatic assumptions of ancient astronomy, namely geocentrism and the ontological primacy of the substance called ether, is likely to generate a somewhat paradoxical situation, just as the centrality in the cosmographic sense of the Earth cannot but be related to the supposed ontological precariousness of the sublunar world. Moreover, when he opted for heliocentrism, Aristarchus of Samos had in mind precisely to overcome this tension, since, for him, an Earth so vulnerable to destruction and death was “unworthy” to be considered as the center of a perfect Universe.

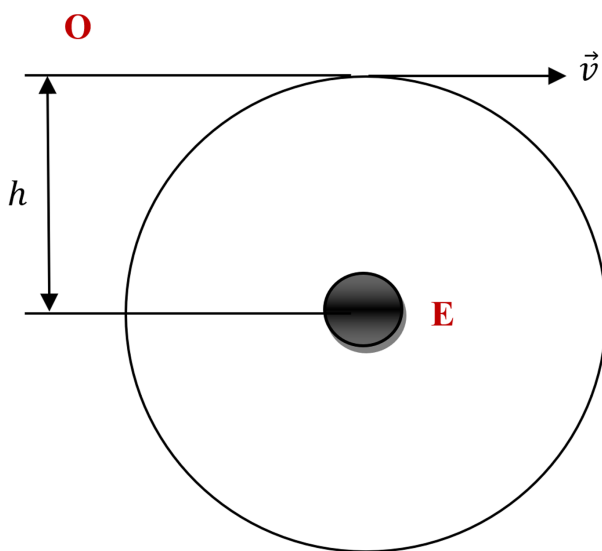
b) To convince that, under the general circumstances of Ptolemaic cosmology, placing the Earth at the physical center of the Universe is not possible, Nicolaus Cusanus used two different categories of reasoning, both based on the method of *reductio ad absurdum*. Thus, the first reasoning¹¹ is based on the fact that, if we insist on the existence of a fixed center of the Universe, then, at that point, the movement, which is null under the visible immobility of the center, will register a minimum, which, seen from the perspective of the whole which is the Cosmos, will acquire an absolute character; in other words, in the supposed center of the world, the movement, canceling itself, registers a minimum level which, in the conditions of the uniqueness of the center, will be the absolute cosmic minimum. At the same time, on the supposed circumference of Ptolemy's cosmos, respectively at the

⁹ W.K.C. Guthrie, *O istorie a filosofiei a grecești*, trans. Mihnea Moise and Lucian Ioan Munteanu (București: Teora, 1999), 192-93.

¹⁰ Guthrie, *O istorie*, 191.

¹¹ Negulescu, *Filosofia*, 104-5.

level of the trajectory of the furthest moving star, the speed of rotation will record a maximum, namely the maximum possible on the scale of the whole universe, which obviously can only have an absolute character. At this point, the cardinal's reasoning becomes entirely particular, with metaphysical considerations taking on physical and reciprocal connotations. Thus, the minimum of motion recorded in the supposed center, absolute as it is, takes on the dimension of a maximum and, from a metaphysical perspective, is even one, a maximum of the absence of motion. Identifying themselves in the order of metaphysics as having "the same content and the same logical value", the two superlative values cannot but coincide – the cardinal believes – also in a physical sense, any kind of quantitative considerations being, in this logic, suppressed. Therefore, this particular type of *coincidentia oppositorum* will impose the conclusion of the physical identity of the center of the world – the Earth – with the circumference of the Cosmos – the vault of the fixed stars, an absurd conclusion that invalidates the veracity of the initial premise of the reasoning, namely the authenticity of geocentrism. Implicitly, the thesis of the Earth's location at the center of the Universe will be unsustainable, so that "it is impossible...for the mechanism of the world to have this Earth as its fixed and immobile center"¹².



The reasoning proposed by Nicolaus Cusanus can be attached to the figure above, where, from the perspective of the Ptolemaic Cosmos, the Earth (E), namely the immobile center of the world, is orbited by a celestial body (O),

¹² Cusanus, *De docta*, 205.

which, situated at a "height" h to the center of rotation (E), moves, on a circular trajectory, with a velocity $v \rightarrow$.

As the cardinal correctly intuit, $v \rightarrow = v \rightarrow(h)$ in the sense that velocity $v \rightarrow$ and E in a height h are directly proportional relationship; therefore, at the center of rotation, $v \rightarrow = 0$, which is precisely that minimum of motion invoked above, so that, implicitly, $v \rightarrow = v \rightarrow_{min}$. In contrast, when $h = h_{max}$, the velocity of any moving celestial body will record a maximum value, i.e. $v \rightarrow = v \rightarrow_{max}$. Hence, unloading the quantities $v \rightarrow_{min}$ and $v \rightarrow_{max}$ from their otherwise defining quantitative dimensions (for $v \rightarrow_{min}$ and $v \rightarrow_{max}$ represent a minimum and a maximum precisely by their magnitude/value relative to a given conventional unit of measurement) and looking at them, from a purely metaphysical point of view, as simple 'extreme points', identical and the trajectory of the furthest moving body will coincide, which obviously can only be absurd, so that the in their quality of expressing the absolute limit values of the variable magnitude $v \rightarrow = v \rightarrow(h)$, it will follow that, from a physical point of view, $v \rightarrow_{min} = v \rightarrow_{max}$. Therefore, the center of rotation very idea of the existence of the center of the world will be invalidated. Of course, the Cusanian reasoning can be objected that aiming a priori to generate an absurd conclusion that can easily be interpreted as such, it uses equality, namely $v \rightarrow_{min} = v \rightarrow_{max}$ (valid only from the perspective of metaphysics) to deduce an eminently physical identity, that between center and circumference. Or, in other words, if the transition from the physical to the metaphysical by postulating the identity $v \rightarrow_{min} = v \rightarrow_{max}$ can be quoted as sustainable, instead the "return" from the plane of metaphysical reasoning to the physical one seems to be less justified.

Going beyond this question, we will also mention that, in concluding the impossibility of placing the Earth in the physical center of the Universe, Nicolaus Cusanus will confer to the identity of the metaphysical order $v \rightarrow_{min} = v \rightarrow_{max}$ an entirely different significance, for, if it cannot be reflected at the level of the material Cosmos, then it will certainly be possible in God and for God, and this because "„He alone is infinite equality"¹³.

Only in God does any conditionality of a logical-rational order disappear, the coincidence of opposites – *coincidentia oppositorum* – is always possible. Therefore, if God transcends any human rational imperative, then He can be seen, simultaneously, as the center and the circumference of the created world ("God is also the center of the Earth and of all the spheres [orbits of the stars] and of everything and everything that is in the world; He is also the infinite circumference of all"¹⁴, an indisputable conclusion despite man's manifest

¹³ Cusanus, *De docta*, 319.

¹⁴ Cusanus, *De docta*, 319.

inability to make it comprehensible to himself¹⁵. Viewed from a theological point of view, the Cushmanian thesis according to which “God alone is center and circumference, He who is everywhere and nowhere”¹⁶, appears to be sufficiently consistent with the well-known biblical-dogmatic considerations concerning the omnipresence and ontological distinction of the Creator from the created world, so that the references to “center” and “circumference” can also be understood as representing the “cataphatic” reflections of an attempt at Christian theognosy.

On the other hand, the second reasoning that Nicolaus Cusanus developed to reject geocentrism is based on his view of the ontological unity of the Cosmos, one that rejects the heterogeneous and hierarchical world thesis formulated by Ptolemy. Thus, the Earth will belong, in solidarity with all the other celestial bodies, stars, and planets, to the same universal order, just as the matter that makes up the Universe is entirely homogeneous in terms of its intrinsic qualities. At the same time, being God’s creation, the world, although good in itself, is not and cannot be perfect (for perfection is His exclusive prerogative), so that both the ‘geometrical’ configuration of the Universe and the dynamics of the continuous movement of the stars will inevitably be marked by a certain disharmony, which will reflect the limits and the value deficit of a Cosmos ontologically different from its Creator¹⁷. Therefore, the unity of the world will be a unity in incompleteness, so that the apparent regular form of the celestial bodies will never be able to reach the perfection of the sphere, just as the trajectories of the stars will inevitably deviate from the perfection of the circle. Therefore, “neither the sun, nor the moon, nor the earth...can describe in the course of [their] motion a true circle”¹⁸. Of course, postulating the “physical” imperfections of the Universe, the cardinal also assumes a theological perspective (in the ontological sense, but also concerning eschatology), so that the lack of perfection of the world induces a state of dissipated tension and expectation in the whole Cosmos, just as “the movement of the whole...tends to circularity and every figure [celestial body] tends to sphericity”¹⁹.

Under these conditions, Cusanus’s argumentation is based on the observation that, as long as no trajectory of the heavenly bodies is perfectly circular, then we certainly cannot speak of the existence of a fixed center of rotation. In itself, the remark is correct, because the quasi-circular trajectories above represent

¹⁵ Florica Neagoe, “Nicolaus Cusanus,” in *Istoria filosofiei moderne și contemporane. De la Renaștere la Epoca Iluminismului* (București: Academiei, 1984), 114 and Negulescu, *Filosofia*, 105.

¹⁶ Cusanus, *De docta*, 325.

¹⁷ Neagoe, “Nicolaus,” 114 and Negulescu, *Filosofia*, 106.

¹⁸ Cusanus, *De docta*, 323.

¹⁹ Cusanus, *De docta*, 327.

nothing but the ellipses of analytical geometry, and more precisely, those ellipses which, despite the minimal eccentricity, do not and cannot have a proper center. However, the cardinal points out that if we insist on defining a certain point as the physical center of the movement of the stars, then, given the non-circularity of the trajectories, the distances from it to the circumference will always be variable, oscillating between a minimum, $d_{\min}$, and a maximum, $d_{\max}$. No matter how many attempts we make to “optimize” the positioning of the supposed center, the difference between $d_{\max}$ and $d_{\min}$ will persist, being impossible to overcome. Therefore, if always $d_{\max} \neq d_{\min}$, then it becomes obvious that the quasi-circular movements of the heavenly bodies cannot have a center, and this despite the appearances fueled by the fact that “we can only perceive the movement by reference to something fixed, i.e. by reference to the poles or the center”²⁰. Not being able to be overcome in the order of tangible reality, the difference between $d_{\max}$ and $d_{\min}$ will cancel out, Nicolaus Cusanus emphasizes again, only in the person of God, as “only He alone is infinite equality”. Implicitly, God will be, and from this perspective, “the center of the world [and], at the same time, the infinite circumference of everything”²¹.

2. The implications of rejecting geocentrism

The repudiation of geocentric cosmology during the period of crystallization of the first seeds of modernity had a spiritual impact to the extent that the Churches (Catholic, mainly, but also Protestant) attributed to Ptolemy's theses, even if only implicitly, the quality of a tangible correlative of the norm of faith and, at the same time, of their sacramental-liturgical practices, crediting them with an independent theological significance. Christ himself, “while blessing them [the apostles], He separated from them and ascended to heaven” (Lk 25:51), so that, inevitably, being on Earth, the medieval Christian was tempted to it is seen as being located below, because in Heaven, that is, above, there is only the throne of the Holy Trinity (“Heaven is My throne and the earth is my footstool” – Acts 7:49). Thus, since “cosmographic data can serve as metaphors for features related to anthropology”²², medieval man could, in perfect solidarity with his Church, see in geocentrism, respectively in “distance”, not only ontological, but also physical, between an Earth located below and a Heaven always above, a “palpable” reflection of the precariousness of one's condition and, at the same time, of one's eschatological aspirations. Precisely for that reason, the contestation

²⁰ Cusanus, *De docta*, 321.

²¹ Cusanus, *De docta*, 317.

²² Rémi Brague, *Înțelepciunea lumii. Istoria experienței umane a universului*, trans. Cornelia Dumitru (Cluj-Napoca: Tact, 2012), 21.

of geocentrism and, subsequently, the advance of heliocentric cosmology, put the Roman Church in a position to admit, explicitly this time, that, as Saint Augustine suggested, Ptolemy's teaching was a surprising but loyal ally, as evidenced by the official condemnation, under Pope Paul V (1616), of Copernicus' theses²³.

a). Despite its lack of veracity, Ptolemy's cosmology had the advantage of being able to "correlate" better than any other cosmographic pattern with both the theological discourse and the hierarchical structure and liturgical service of the medieval Church. The very essential data of a geocentric and heterogeneous Cosmos, such as the Ptolemaic one, allowed the medieval Church to relate (with the assent of the faithful, one based on the most common experience) to the distinction between Earth and Heaven – a separation that only in it and through it man could overcome it! – converting its ontological and axiological dimensions into an immediately tangible and, therefore, directly experiential reality. Through this, the concepts of the *bottom* – the place of the Earth and the *top* – the place of Heaven, came to give a special concreteness to the perspectives that the Church opened on the world, man and their destiny, as the very idea of the bottom can easily be associated with perishability, timelessness and death, while the above concept will be easily related to perfection, boundlessness, or eternity. Human existence itself will be placed between a bottom – the earthly world, the one condemned to decay and death, the environment of man fallen through the sin of the forefathers, and a top – the heavenly world, the world of all perfections and eternal life, the waiting horizon of each individual. An always palpable *bottom* (through the very avatars of the post-Adamic human condition) and a *top* – a synthesis of general human aspirations, will therefore constitute the existential landmarks of the medieval Christian "on earth, under heaven"²⁴ and, through this, perfectly aware of his place in the Cosmos. Moreover, through the mediation of the two "physical" references, the very idea of God's transcendence acquires a certain representation, because, as Mircea Eliade wrote, "the simple contemplation of Heaven" reveals the existence of a reality "inaccessible to man as such" and which, here, can be deduced "...from the mere awareness of infinite height", the idea of "high" itself suggesting something of "the divine prestige of transcendence, of absolute reality, of perpetuity"²⁵. Thus, valued from the perspective of theology, the notions of *bottom* and *top* will acquire meta-physical valences, allowing easy intuition of the ontological and axiological relationship between earthly and heavenly realities. On this basis, faith itself will become somewhat more intelligible, precisely because only on its basis and through the

²³ Taubes, *Teologia*, 24, 27.

²⁴ Brague, *Înțelepciunea*, 21.

²⁵ Mircea Eliade, "Morfologia religiilor. Prolegomene," in *Supliment al publicației Jurnalul Literar*, no. 1 (1993): 87-88.

intercession of the Church. man can hope to overcome, someday, the distinction between *bottom* and *top*.

At the same time, we must not omit that the physical landmarks corresponding to traditional ancient cosmology (down, up, bottom, top) overlapped with the thesis of the heterogeneity of the Cosmos, a theme, in turn, recognizable in the Church's discourse on the incompatibility of the Earth of humans with the Heaven of God. Practically, put in a position to experience the limitations imposed by his condition, the medieval man related to them by inevitably opposing them to the pure and perfect reality above him. Thus, forced to look up to contemplate the Heaven of God, the medieval man experienced the notion of the *bottom* not only in terms of its physical constituent but also as a measure, equally tangible, of the precariousness of his condition, of the inferiority of his positioning to ontological level. Practically, Ptolemy's cosmology "endows" the notions of *bottom* and *top* with a certain theological openness, they describe the fundamental terms of the way of relating the fallen man (and, by way of consequence, located *at the bottom*) to the heavenly realities, some corresponding to the concept of quasi-ontologically from above. Practically, far from being incommunicable, the two categories of meanings of the notions of *bottom* and *top* will interfere to find themselves perfectly juxtaposed in the teaching and liturgical practice of the medieval Church, so that between the physical order of the world and the theological and sacramental order creates and will persist an obvious parallelism.

On the other hand, the notion of the *top* comes to indicate, just as tangibly, the meaning of the deepest human aspirations, namely those related to overcoming the anthropological consequences related to its location in the *lowest* point of the Universe. Man's expectations – some assumed as such by the Church through its sacramental-liturgical work – will therefore be structured adjacent to a vertical axis oriented from *bottom* to *top*, an axis which, Jacob Taubes believes, "reflects the general condition of man in the Universe" and on which Ptolemy's cosmology was able to easily highlight²⁶. We will be practically in front of that axis mundi which, taking, for example, the face of Jacob's ladder (Gen 28:11-15) or, more precisely, of the Savior's Cross, indicates and at the same time makes possible the "ascension" of man and his return in the proximity of the Creator²⁷. Precisely for this reason, as long as "the Liturgy presupposes a union in grace between heaven and earth"²⁸ as, in the Eucharistic synax, the Kingdom of God itself descends, this time in a downward movement, "among people, in the midst and within them"²⁹,

²⁶ Taubes, *Teologia*, 23.

²⁷ Mircea Eliade, *Imagini și simboluri*, trans. Alexandra Beldescu (București: Humanitas, 2013), 48-49.

²⁸ Taubes, *Teologia*, 24.

²⁹ Paul Evdokimov, *Orthodoxia*, trans. Irineu Ioan Popa (București: EIBMBOR, 1996), 284.

it becomes indisputable that, using the geocentric conception, the Roman Church established a complete analogy between earthly and heavenly realities. From this perspective, the Church appears as “the organism where the social and the cosmic intertwine”, in its divine-human space establishing and becoming experiential “the fundamental correspondence between below and above, heaven and earth, natural and supernatural”³⁰. Implicitly, the Church itself will represent an axis of the world, the vertical along which the Earth enters into connection with Heaven, any separation (physical and metaphysical) between them being immediately superseded³¹.

b). Rejecting geocentrism, Nicolaus Cusanus opened a path that, once perfected by Copernicus and his successors³², led to the dilution of the theological significance (as well as the pastoral relevance, for that matter), of the notions of bottom and top, losing their capacity, with which they were credited by the mass of believers, to faithfully reflect the inhomogeneous structure of the Cosmos and, thereby, the religious order of the world. In fact, with the loss of such a faithful “ally” that had been the Ptolemaic cosmology, theology saw itself deprived of that extra intelligibility that tangible reality could give it. Practically, the Church saw itself in the situation of no longer being able to invoke, in support of its discourse, its hierarchical structure and its liturgical service, the arguments developed based on the spiritual correlatives of such easily experiential notions as the ones *bottom and top*. In these conditions, if the relative position of the Earth of humans and the Heaven of God excludes them a priori, the notions of *bottom and top* seem to be reduced, as Jacob Taubes wrote, to the common quality of “simple metaphors”, incapable of defining a commensurable way the vertical axis of the world and thereby to mediate the once axiomatic interaction between theology and cosmology. Therefore, lacking tangible correspondents at the level of cosmology, the notions of bottom and top “were forced to withdraw into the field of human interiority”, being able to continue to be valued in a theological sense, but only from the perspective of an “order of the heart”, of a belief devoid of the possibility of relating to observable reality³³.

Of course, faith seen as a gift of God (Eph 2:8; Phil 1:29) can only, at most, be augmented by the physical references made available by cosmology. Therefore, it would be profoundly wrong to consider that, taken as such, heliocentrism would inhibit individual adherence to faith, but it would certainly “move” the relevance of the terms bottom, top, top, or bottom into that completely internalized and devoid

³⁰ Taubes, *Teologia*, 23.

³¹ Mircea Eliade, *Mitul eternei reînțoarceri*, trans. Maria Ivănescu and Cezar Ivănescu (București: Univers Enciclopedic, 2011), 21-23.

³² Koire, *De la lumea închisă*, 36-51.

³³ Taubes, *Teologia*, 25-26.

of correspondent in the physical world of which Jacob Taubes spoke. Thus, under the conditions of the abandonment of geocentrism by those who believe, theology will be able to speak of *bottom* and *top* only in a spiritual sense, but even then the terms in question will express the same antagonism between death and life, between perishable and eternal and between all bundles of oppositions between Earth and Heaven that only the Eucharistic ministry of the Church, based on “the vertical descent of the Holy Spirit”³⁴, can overcome. That is why the spiritual progress of man will be connected, even under the conditions of the Cusanian (and Copernican) Cosmos, with the idea of ascent, elevation and elevation by grace beyond the specific ontological limitations of the *bottom* world.

Nevertheless, there is no doubt that the “attacks” on geocentrism caused the Western Church a certain uneasiness precisely because, for more than a millennium, Ptolemaic cosmology had provided it with those physical arguments that could be correlated happily both with its “theoretical” discourse and its hierarchical structure (one cited as analogous to the heavenly hierarchy) or its sacramental-liturgical service. Even if it did not react to the cosmographic vision of Nicolaus Cusanus, Rome finally understood that depriving the notions of bottom and top of their theological correlatives and, implicitly, the progressive suppression of the correspondence with the heavenly hierarchy of its organizational and functional structures, can “threaten the analogy of the heavenly order with the earthly one”³⁵, an analogy that only she could materialize.

c) As the important German sociologist Niklas Luhmann pointed out, the “collapse” of the theses of traditional cosmology constituted (alongside, possibly, the proliferation of the thesis of the separation of morality from religion) the most pertinent indicator of the coagulation of the “spirit” of modernity in the Western world and, with it, of the innovative way in which the new paradigm looks at man and his connection with God³⁶. Therefore, anticipating the great discoveries that will follow, Cusanian astronomy can also claim something of the “spirit” of modernity through its very preoccupation with questioning tradition and, above all, through its attempt to explain the world through reasoning and observation, that is, from perspectives and with consistently analytical and empirical methods³⁷. In other words, when he assumes a distance on rational grounds from the model of the geocentric and inhomogeneous Cosmos and advances his own vision of

³⁴ Ioannis Zizioulas, *Creație și Euharistie*, trans. Caliopie Papacioc (București: Bizantină, 1999), 23.

³⁵ Taubes, *Teologia*, 24-25.

³⁶ Andrei Marga, “Modernitate, religie, cultură,” in *Biserica în epoca globalizării* (Alba Iulia: Reîntregirea, 2003), 27.

³⁷ H.-R. Patapievici, *Omul recent. O critică a modernității din perspectiva întrebării: Ce se pierde atunci când ceva se câștigă?* (București: Humanitas, 2001), 103.

the world, Nicolaus Cusanus anticipates something from the logic of modernity and from its propensity to reconsider all the data of knowledge. Implicitly, we will admit that, through his approach, Nicolaus Cusanus opened a path at the end of which modernity, gradually becoming dominant, deconstructed, as ancient and irrelevant, the entire scaffolding of correspondences and analogies between Earth and Heaven with which the Church of Rome operated and which gave its teaching, structure and liturgical practice an easily perceptible correspondence with the tangible spatial coordinates of everyday existence.

Of course, through the working method adopted and the conclusions revealed, the cardinal's cosmology is not fully modern except, possibly, through the thesis of the complete homogeneity (from the perspective of the matter that composes it) of the observable world, one, in addition, subordinated to universal laws (the universality of movement, the absence of centers of rotation, the quasi-circular orbits of the stars, the thesis of the mutual "influence" of the heavenly bodies³⁸). However, the thesis of a non-geocentric and non-hierarchical Cosmos is able, alone, to compromise the analogy between the physical bottom and the metaphysical bottom that the Church cultivated, making less intelligible the connection between man's position concerning Heaven and the precariousness of his ontological status. Furthermore, in a perfectly homogeneous Cosmos, the world of man could no longer, by its mere positioning on Earth and in its immediate proximity, be considered inferior to the heavenly domain. That is why the Cardinal's Heaven – although no less Christian – could still be associated with the ideas of perfection and fullness only from the perspective of that "order of the heart" that Jacob Taubes spoke of, its association with the notions of *bottom* and *top* being completely upset.

The fact is that, under the conditions of the new cosmology, the analogy between the Earth and the Sky became possible from an exclusively spiritual perspective, which could only be invoked from the perspective of a faith that, alone, could connect a bottom and top loaded with such deep theological meanings. In these conditions, referring, among many other factors, to a reality in which the notion from above no longer referred to God except possibly in a spiritual sense, modernity assumed that, as long as the very structure of the world does not recognizable Creator, then the Cosmos can only be a perfectly autonomous entity, exhaustively explainable physico-mathematically and capable of existing "by itself"³⁹. Practically, the fact that the heliocentric Universe no longer offered the necessary cosmographic foundations to reveal and value in a theological sense the distinction between Earth and Heaven, allowed modernity to absolutize earthly

³⁸ Cusanus, *De docta*, 335.

³⁹ Dumitru Popescu, *Hristos, Biserica, Societate* (București: EIBMBOR, 1998), 53.

reality, considering it as the only truly relevant one. Implicitly, the concept of axis mundi will lose any meaning, it will become, from the “spiritualized” image of Jacob’s ladder, a mere fiction, as modern man has deliberately abandoned any concern with the transcendent.

Thus, for the man dominated by the primacy that modernity confers on the material world, the notion of above can only have a physical meaning, because he is too little tempted to relate to its theological correlative, that is, to God. Paradoxically, however, even if it refuses to refer to the theological acceptance of the notion from above (including through alienation from the Church), the condition of modern man fully assimilates, precisely through its consumerist-utilitarian accents, the correlatives of the idea from the metaphysical bottom: temporality, perishability, death. As a result, between Christianity and modernity there will persist a tension that is difficult enough to resolve⁴⁰, precisely because “the meaning of our life is discovered only when we discover our roots deeply embedded in the triune and cosmic reality, in Christ”⁴¹, precisely in the transcendent reality to which the above notion should refer us.

3. Conclusions

Having reached the end, we will be able to conclude that, by rejecting the essential premises of the Ptolemaic cosmology, Nicolaus Cusanus made, implicitly and completely unintentionally, the first breach in the so consolidated theological and liturgical edifice that the Western Church seemed to have created around the thesis of the analogy between Earth and Sky. In fact, by depriving the physical notions of below and above of their theological meanings and thereby diminishing the disposition and ability of individuals to perceive their true place in the Universe, the thesis of the homogeneous and non-geocentric Cosmos described by the cardinal anticipated some of the negative consequences in the plane of spirituality that modern thought generated in the following centuries. That is why, if, as Jacob Taubes said, the development of the science of astronomy in the Renaissance era reflects the very process of distancing Western society from medieval values, it seems obvious to us that, through his cosmological vision, Nicolaus Cusanus foreshadowed something from the dawn of modernity.

⁴⁰ Nicolae Achimescu, *Religie, modernitate și postmodernitate* (București: Trinitas, 2013), 422-23.

⁴¹ Dumitru Popescu, *Omul fără rădăcini* (București: Nemira, 2001), 21.